Match each definition with the correct term.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | number and variety of species in a given area | a. | ecotourism |
| 2. | species critically important to the functioning of an ecosystem | b. | keystone species |
| 3. | piece of DNA that codes for a specific trait that can be inherited | c. | biodiversity |
| 4. | form of tourism that supports the conservation and sustainable development of ecologically unique areas | d. | gene |

Identify each example as a measure of biodiversity or a population.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | There are 13 native maple tree species in North America. | a. | biodiversity |
| 2. | Habitat destruction is a leading cause of species extinction. | b. | population |
| 3. | There are 3000 cottontail rabbits in Amherst County. |  |  |
| 4. | There is a greater variety of ecosystems in the US than in Canada. |  |  |
| 5. | The density of rats is greater than that of rat snakes. |  |  |

Compare and contrast these 2 hotspots (at least 2 similarities and 2 differences).

|  |  |
| --- | --- |
| **New Zealand** | **Himalaya** |
| * A mountainous archipelago once dominated by temperate rainforests * extraordinary levels of endemic species, including its most famous representative, the kiwi * None of its mammals, amphibians, or reptiles is found anywhere else in the world. * Since the island’s colonization by humans 700 years ago 50 bird species have gone extinct. * Today, invasive species pose the most serious threat, but habitat destruction, is also a key problem. | * The Himalaya Hotspot is home to the world’s highest mountains * The mountains rise abruptly, resulting in a diversity of ecosystems. * Vascular plants have even been recorded at more than 6,000 meters. * The hotspot is home to important populations of numerous large birds and mammals, including vultures, tigers, elephants, rhinos and wild water buffalo. * Threatened by habitat loss due to deforestation and overgrazing |

Match each term with the correct example.

|  |  |  |  |
| --- | --- | --- | --- |
| 1. | Elephants modify their environment so much that without them, many other species would suffer. | a. | species diversity |
| 2. | There are over 900 species of birds in Panama. | b. | genetic bottleneck |
| 3. | When the elephant seal population decreased dramatically, some gene variations were lost forever. | c. | keystone species |
| 4. | Kangaroos and koalas are only native to Australia. | d. | ecosystem diversity |
| 5. | Africa has a variety of ecosystems, including deserts and rainforests. | e. | endemic species |

Match each benefit with the correct example.

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| --- | --- | --- | --- |
| 1. | If populations are reduced too much, inbreeding occurs and the species is at greater risk for genetic problems. | a. | Species are Connected to Ecosystems |
| 2. | Most antibiotics are derived from chemicals in fungi. | b. | Species and Population Survival |
| 3. | Overhunting of otters led to the loss of kelp beds because otters are keystone species. | c. | Medical, Industrial, and Agricultural Uses |
| 4. | Ecotourism is popular because it allows people to enjoy the environment and provides income for local people. | d. | Ethics, Aesthetics, and Recreation |